Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Division

Name of Work: Developments of Roads andDrains at PDMS Premises (Police Driving and Maintenance School) in ward no - 01 of Yelahanka Sub Division

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Civil Work								
1	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No-27,I No-5.33,KPWD SR 2018-19)								
	Basic rate	105.00							
	Area Weightage 6%	6.30							
	Total	**111.30**							
		Sqm							
	Main Road		2	57.00	1.35		153.90		
			2	240.00	1.35		648.00		
			2	72.00	1.35		194.40		
			2	177.00	1.35		477.90		
	Cross Road-1		2	63.00	1.35		170.10		
	Cross Road-2		2	103.00	1.35		278.10		
	Cross Road -4		2	112.00	1.35		302.40		
							2224.80		
	consider 40%						**889.92**		
	Deduct 20% Missing Damaged/Broken						177.98		
							711.94	**111.30**	**79238.4768**
2	KSRRB 300-1. **Earthwork excavation by manual means** for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(I No-19.1, P No-144)								
	Basic rate	130.00							
	Area Weightage 6%	7.80							
	Loading and Unloding & Lead	82.60							
	Total	**220.40**							
		Cum							
	Desilt								
	Main Road		2	57.00	0.50	0.45	25.65		
			2	240.00	0.50	0.40	96.00		
			2	72.00	0.50	0.43	30.96		
			2	177.00	0.50	0.40	70.80		
	Cross Road-1		2	63.00	0.50	0.40	25.20		
	Cross Road-2		2	103.00	0.50	0.40	41.20		
	Cross Road -4		2	112.00	0.50	0.40	44.80		
							334.61		
	50% volume						167.31		
							167.31	**220.40**	**36,874.02**
3	**Providing granite slabs** of selected quality roughly dressed having a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete. (P.No.27, I.No.5.31.1 of PW, P&IWTD SR 2018-19)								
	Basic rate	700.00							
	Area Weightage 6%	42.00							
	Total	**742.00**							
		Sqm							

	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Frm item no. 01						177.98		
							177.98	**742.00**	**132064.128**
4	KSRB 4-1.6 ; Providing and laying in **position plain cement concrete of Mix 1:2:4** with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No-13,I No-4.6)								
	Basic rate	5422.00							
	Area Weightage 6%	325.32							
	Total	**5747.32**							
		Cum							
	For Kerb Stone								
	Main Road		2	54.00	0.20	0.10	2.16		
			2	235.00	0.20	0.10	9.40		
			4	70.00	0.20	0.10	5.60		
			2	175.00	0.20	0.10	7.00		
	Cross Road-1		4	63.00	0.20	0.10	5.04		
	Cross Road-2		2	103.00	0.20	0.10	4.12		
							33.32	**5747.32**	**191500.70**
5	Providing and fixing **pre cast solid cement concrete kerb stones** made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete. As per the direction of Engineer incharge. (P.No.27, I.No.5.30 of PW, P&IWTD SR 2018-19)								
	Basic rate	408.00							
	Area Weightage 6%	24.48							
	Total	**432.48**							
		Nos							
	For Kerb Stone								
	Main Road		2	54.00			108.00		
			2	235.00			470.00		
			4	70.00			280.00		
			2	175.00			350.00		
	Cross Road-1		4	63.00			252.00		
	Cross Road-2		2	103.00			206.00		
							1666.00		
							3702.00	**432.48**	**1601040.96**
6	**Painting two coats** after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 Specification No. KSRRB M800-6. (P.No.180, I.No.24.1 of PW, P&IWTD SR 2018-19)								
	Basic rate	80.00							
	Area Weightage 6%	4.80							
	Total	**84.80**							
		Sqm							
	For Kerb Stone								
	Main Road		2	54.00	0.30		32.40		
			2	235.00	0.30		141.00		
			4	70.00	0.30		84.00		
			2	175.00	0.30		105.00		
	Cross Road-1		4	63.00	0.30		75.60		
	Cross Road-2		2	103.00	0.30		61.80		

No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
							499.80	84.80	42,383.04
7	KSRRB M300-53. **Construction of embankment** with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of modified proctors density. MORTH Specification No. 305(I No-19.60,P No-147 of PWD BCSR 2018-19)								
	Basic rate	325.00							
	Area Weightage 6%	19.50							
	Total	**344.50**							
		Cum							
	For Shoulder								
	Main Road		2	57.00	0.80	0.075	6.84		
			2	240.00	0.80	0.075	28.80		
			2	72.00	0.80	0.075	8.64		
			2	177.00	0.80	0.075	21.24		
	Cross Road-1		2	63.00	0.80	0.075	7.56		
	Cross Road-2		2	103.00	0.80	0.075	12.36		
							85.44	344.50	29,434.08
8	KSRRB 300-50. **Scarifying bituminous course** 50mm to 75mm thick along with premix carpet / surface dressing by mechanical means attached with scarifier without disturbing the base and stacking the debris including cost of all labour charges, HOM complete as per specifications. MORTH / Chapter 3(I No-19.56,P No-146 of PWD BCSR 2018-19)								
	Basic rate	39.00							
	Area Weightage 6%	2.34							
	Total	**41.34**							
		Sqm							
	Main Road		1	57.00	7.00		399.00		
			1	240.00	12.50		3000.00		
			2	72.00	6.00		864.00		
			1	177.00	14.00		2478.00		
	Cross Road-1		2	63.00	7.00		882.00		
	Cross Road-2		1	103.00	7.00		721.00		
							8344.00	41.34	344940.96
9	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143,KPWD SR 2018-19)								
	Basic rate	41.00							
	Area Weightage 6%	2.46							
	Loading and Unloding & Lead	25.60							
	Total	**69.06**							
		Cum							
	Entrance		1	10.00	8.00	0.25	20.00		
	CC ROAD								
	Surround Buiding		1	20.00	20.00	0.25	100.00		
			1	9.70	4.40	0.25	10.67		
	Cross Road -3		1	96.00	12.00	0.25	288.00		
	Cross Road -4		1	112.00	5.00	0.25	140.00		
	Ground Entrance		1	11.00	9.00	0.25	24.75		
							583.42	69.06	40,290.99

No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
10	KSRRB M600-1.Providing and **Constructing dry lean cement concrete** mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5. with OPC at 150 kg/cum and coarse aggregate .86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with Slip form paver with electronic sensor. (I No-22.1,P No-174)								
	Basic rate	3585.00							
	Area Weightage 3%	107.55							
	Total	**3692.55**							
		Cum							
	CC ROAD								
	Surround Buiding		1	20.00	20.00	0.15	60.00		
			1	9.70	4.40	0.15	6.40		
	Cross Road -3		1	96.00	12.00	0.15	172.80		
	Cross Road -4		1	112.00	5.00	0.15	84.00		
	Ground Entrance		1	11.00	9.00	0.15	14.85		
							338.05	**3692.55**	**1248273.91**
11	**Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30** over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to(P.No-176,I No-22.6.1)								
	Basic rate	4916.00							
	Area Weightage 3%	147.48							
	Total	**5063.48**							
		Cum							
	CC ROAD								
	Surround Buiding		1	20.00	20.00	0.15	60.00		
			1	9.70	4.40	0.15	6.40		
	Cross Road -3		1	96.00	12.00	0.15	172.80		
	Cross Road -4		1	112.00	5.00	0.15	84.00		
	Ground Entrance		1	11.00	9.00	0.15	14.85		
							338.05	**5063.48**	**1711719.54**
12	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								

No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Basic rate	1888.00							
	Area Weightage 6%	113.28							
	Total	**2001.28**							
		Cum							
	Entrance		1	10.00	8.00	0.150	12.00		
	Main Road		1	57.00	7.00	0.150	59.85		
			1	240.00	12.50	0.200	600.00		
			2	72.00	6.00	0.200	172.80		
			1	177.00	14.00	0.200	495.60		
	Cross Road-1		2	63.00	7.00	0.150	132.30		
	Cross Road-2		1	103.00	7.00	0.150	108.15		
							1580.70	**2001.28**	**3163423.30**
13	KSRRB M500-6. Providing and **applying primer coat** with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6)								
	Basic rate	25.00							
	Area Weightage 6%	1.50							
	Total	**26.50**							
		Sqm							
	Entrance		1	10.00	8.00		80.00		
	Main Road		1	57.00	7.00		399.00		
			1	240.00	12.50		3000.00		
			2	72.00	6.00		864.00		
			1	177.00	14.00		2478.00		
	Cross Road-1		2	63.00	7.00		882.00		
	Cross Road-2		1	103.00	7.00		721.00		
							8424.00	**26.50**	**223236.00**
14	KSRRB 500-7. Providing and applying **tack coat** using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-161,I No-21.7)								
	Basic rate	12.00							
	Area Weightage 6%	0.72							
	Total	**12.72**							
		Sqm							
	Entrance		1	10.00	8.00		80.00		
	Main Road		1	57.00	7.00		399.00		
			1	240.00	12.50		3000.00		
			2	72.00	6.00		864.00		
			1	177.00	14.00		2478.00		
	Cross Road-1		2	63.00	7.00		882.00		
	Cross Road-2		1	103.00	7.00		721.00		
							8424.00	**12.72**	**107153.28**

	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
15	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6)								
	Basic rate	5403.00							
	Area Weightage 6%	324.18							
	Total	**5727.18**							
		Cum							
	Entrance		1	10.00	8.00	0.05	4.00		
	Main Road		1	57.00	7.00	0.05	19.95		
			1	240.00	12.50	0.05	150.00		
			2	72.00	6.00	0.05	43.20		
			1	177.00	14.00	0.05	123.90		
	Cross Road-1		2	63.00	7.00	0.05	44.10		
	Cross Road-2		1	103.00	7.00	0.05	36.05		
							421.20	**5727.18**	**2412288.22**
16	Providing and laying **bituminous concrete 40mm thick** with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic)(P.No-171,I No-21.78.12)								
	Basic rate	6379.00							
	Area Weightage 6%	382.74							
	Total	**6761.74**							
		Cum							
	Entrance		1	10.00	8.00	0.03	2.40		
	Main Road		1	57.00	7.00	0.03	11.97		
			1	240.00	12.50	0.03	90.00		
			2	72.00	6.00	0.03	25.92		
			1	177.00	14.00	0.03	74.34		
	Cross Road-1		2	63.00	7.00	0.03	26.46		
	Cross Road-2		1	103.00	7.00	0.03	21.63		
							252.72	**6761.74**	**1708826.93**
17	KSRRB M800-13.**Road Marking** with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH								
	Basic rate	429.00							
	Area Weightage 6%	25.74							
	Total	**454.74**							
		Sqm							
	Main Road		2.5	57.00	0.10		14.25		
			2.5	240.00	0.10		60.00		
			5.0	72.00	0.10		36.00		

	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Cross Road-1		2.5	177.00	0.10		44.25		
	Cross Road-2		5.0	63.00	0.10		31.50		
			2.5	103.00	0.10		25.75		
							211.75	454.74	96,291.20
18	Fabricating, providing and erecting in position **Hot dip galvanised Gate.** Using 72 X 72 X 4.8mm Sq. GI Pipe Frame with Top pipe bending in heavy duty hydraulic press with sand packing and hot bending to form double arch as per drawing profile, 20mm hot dip galvanised sq. rod for verticals at 150mm c/c, as shown in the drawing including providing hot dip galvanised forged ornamental design in between sq. rods and heads at top, middle and bottom. Intermediate supports of 75X12 mm and 50X6 mm arch bend to hot dip galvanised flats. The work is inclusive of throughing GI flat GI sq. rods, placing, welding all the joints including grinding, finishing metal putty, painting two coats enamel painting. The rate is inclusive of all materials like GI sq. pipe, GI sq. rods, GI forged designs etc., heavy duty hinges are made out of 75mm solid sq. block assembled with 20mm dia bearing in three places for each flop. Heavy Duty Locking arrangements at tow places including cost of labour, painting, erecting charges using hoist pulley cranes with all lead and lift, loading, transportation, unloading, scaffolding charges and all other incidental charges for successful completion of the work as per directions of the Engineer-in-charge of the work. (Data Rate)								
	Data Rate	12475.00							
		Sqm							
	Gate 1		1.0	4.00	1.80		7.20		
	Gate 2		1.0	1.10	1.20		1.32		
							8.52	12475.00	106287.00
								Total Construction Cost	13275259.80
								Towards GST 12%	1593031.18
								PMC Charges	131000.00
								Sub Total	14999290.98
								Miscellaneous	709.02
								Grand Total Total	15000000.00

Technical Sanction
Accorded For ...150.00 lakhs
Head of A/C...3729.....
CER NO ....28..... Dt:01-07-2020
TA [illegible]
ACE (WNK)

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019, issue rates dated 03-01-2020 and Data Rates

Assistant Engineer
Ward 01
BBMP

Assistant Executive Engineer
Yelahanka Sub Division
BBMP

Executive Engineer
Yelahanka Division
BBMP

Administrative Sanction for Rs. .....150.00 lakhs
.....one crore fifty lakhs only
is accorded under head ..P-3729.....
.....Development works 2019-20
Registered as CE No. ..... Subject to conditions contained in enclosed memo No.EE/YNK/BS/47/2020-21..Dt:9-10-2020

Executive Engineer